

## **AMENDMENTS TO THE CLAIMS:**

This listing of claims will replace all prior versions, and listings, of claims in this application:

### **Listing of Claims:**

Claim 1 (Cancelled).

| Claim 2 (Currently amended): The method of Claim ~~4~~22 wherein said treatment composition is maintained at a temperature of 25 to 99°C

| Claim 3 (Currently amended): The method of Claim ~~4~~22 wherein said plastic article is contacted with said treatment composition by at least one of:

- (I) dipping at least a portion of the surface of said plastic article into said treatment composition; and
- (II) applying said treatment composition to at least a portion of the surface of said plastic article.

Claim 4 (Original): The method of Claim 3 wherein said treatment composition is applied to at least a portion of the surface of said plastic article by at least one of spray application, curtain application and spin application.

| Claim 5 (Currently amended): The method of Claim ~~4~~22 wherein said plastic article comprises a polymer selected from at least one of (co)polyesters, (co)polycarbonates, polyesterpolycarbonate copolymers, acrylonitrile-butadiene-styrene copolymers, polyamides, polyurethanes, polyalkyl(meth)acrylate and styrene copolymers.

| Claim 6 (Currently amended): The method of Claim ~~4~~22 wherein R<sup>1</sup> is selected from linear or branched C<sub>1</sub>-C<sub>18</sub> alkyl, R<sup>2</sup> is selected from linear or branched C<sub>1</sub>-C<sub>18</sub> alkyl and H, and n is 2.

Claim 7 (Original): The method of Claim 6 wherein R<sup>1</sup> is selected from n-butyl, i-butyl and t-butyl, and R<sup>2</sup> is selected from n-butyl, i-butyl, t-butyl and H.

Claim 8 (Currently amended): The method of Claim 4-22 wherein said treatment composition further comprises a surfactant that is different than said carrier, said surfactant being selected from at least one of: anionic surfactants; amphoteric surfactants; and a non-ionic surfactant selected from at least one poly(C<sub>2</sub>-C<sub>4</sub> alkoxyated) C<sub>14</sub>-C<sub>18</sub> unsaturated fatty acid.

Claim 9 (Original): The method of Claim 8 wherein said surfactant is present in an amount of from 1 to 15 percent by weight, based on the total weight of said treatment composition.

Claim 10 (Currently amended): The method of Claim 4-22 wherein said diol is a poly(C<sub>2</sub>-C<sub>4</sub> alkylene glycol) selected from diethylene glycol, triethylene glycol, tetraethylene glycol, pentaethylene glycol and mixtures thereof.

Claim 11 (Original): The method of Claim 10 wherein said diol is diethylene glycol.

Claim 12 (Original): The method of Claim 10 wherein R<sup>1</sup> is selected from linear or branched C<sub>1</sub>-C<sub>18</sub> alkyl, R<sup>2</sup> is H, n is 2 and m is 1.

Claim 13 (Original): The method of Claim 12 wherein R<sup>1</sup> is selected from n-butyl, i-butyl and t-butyl.

Claim 14 (Currently amended): The method of Claim 4-22 wherein said plastic article comprises at least one of static dyes, photochromic dyes, pigments, crosslinked polymethylmethacrylate microspheres, glass microspheres and metal flakes.

Claim 15 (Currently amended): The method of Claim 4-22 wherein said plastic article comprises a thermoplastic polycarbonate selected from at least one of thermoplastic aromatic polycarbonates and thermoplastic aliphatic polycarbonates.

Claim 16 (Currently amended): The method of Claim ~~4~~22 wherein said plastic article is a molded article comprising a thermoset polycarbonate.

Claim 17 (Original): The method of Claim 16 wherein said thermoset polycarbonate is a polymerizate of a polymerizable composition comprising polyol(ally carbonate) monomers.

Claim 18 (Currently amended): The method of Claim ~~4~~22 wherein said plastic article is a molded article selected from shaped articles, films and sheets.

Claim 19 (Original): The method of Claim 18 wherein said molded article is a shaped article selected from optical lenses, ophthalmic lenses, sunshade lenses and glazings.

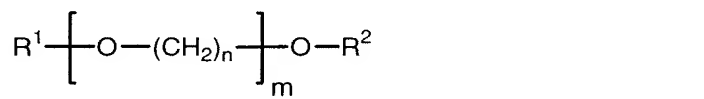
Claim 20 (Currently amended): The method of Claim ~~4~~22 wherein said plastic article is selected from thermoplastic pellets and thermoplastic strands.

Claim 21 (Original): The method of Claim 20 further comprising, melting at least one of said treated thermoplastic pellets and said treated thermoplastic strands to form a treated molten thermoplastic composition, and introducing said treated molten thermoplastic composition into a mold, thereby forming a treated shaped molded article.

Claim 22 (Currently amended): ~~The A~~ method of Claim ~~1~~ further comprising treating a plastic article comprising:

- (a) providing a plastic article comprising at least one polymer selected from thermoplastic polymer and thermoset polymer;
- (b) contacting at least a portion of the surface of said plastic article with a treatment composition consisting of,
  - (i) at least one additive selected from UV stabilizers, optical brighteners, mold release agents, antistatic agents, thermal stabilizers and antimicrobial agents,
  - (ii) water,

(iii) at least one carrier represented by the following general formula I,



wherein R<sup>1</sup> is a radical selected from the group consisting of linear or branched C<sub>1</sub>-C<sub>18</sub> alkyl, benzyl, benzoyl and phenyl,

R<sup>2</sup> is a radical selected from the group consisting of linear or branched C<sub>1</sub>-C<sub>18</sub> alkyl, benzyl, benzoyl, phenyl and H,

n is 2, 3 or 4, and

m is 1 to 35, and

(iv) a diol selected from at least one of linear or branched C<sub>2</sub>-C<sub>20</sub> aliphatic diols, poly(C<sub>2</sub>-C<sub>4</sub> alkylene glycol), cycloaliphatic diols having from 5 to 8 carbon atoms in the cyclic ring, monocyclic aromatic diols, bisphenols and hydrogenated bisphenols;

(c) maintaining said portion of said plastic article in contact with said treatment composition for a period of time at least sufficient to form a treated plastic article;

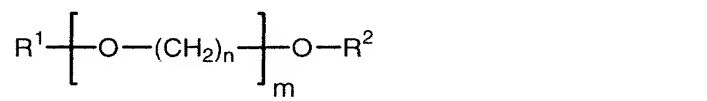
(d) removing said treated plastic article from contact with said treatment composition said water present in the treatment composition in an amount of 50 to 85 percent, said carrier present in the treatment composition in an amount of 10 to 30 percent and said diol present in the treatment composition in an amount of 5 to 20 percent, said percent all occurrences relative to the weight of the treatment composition; and

(e) contacting said treated plastic article with a dye composition comprising at least one dye, thereby forming a treated and dyed plastic article.

Claim 23 (Cancelled).

Claim 24 (Currently amended)): ~~The A~~ method of Claim 1 further comprising: treating a plastic article comprising:

- (a) providing a plastic article comprising at least one polymer selected from thermoplastic polymer and thermoset polymer;
- (b) contacting at least a portion of the surface of said plastic article with a treatment composition consisting of,
  - (i) at least one additive selected from UV stabilizers, optical brighteners, mold release agents, antistatic agents, thermal stabilizers and antimicrobial agents,
  - (ii) water,
  - (iii) at least one carrier represented by the following general formula I,



wherein R<sup>1</sup> is a radical selected from the group consisting of linear or branched C<sub>1</sub>-C<sub>18</sub> alkyl, benzyl, benzoyl and phenyl,

R<sup>2</sup> is a radical selected from the group consisting of linear or branched C<sub>1</sub>-C<sub>18</sub> alkyl, benzyl, benzoyl, phenyl and H,

n is 2, 3 or 4, and

m is 1 to 35, and

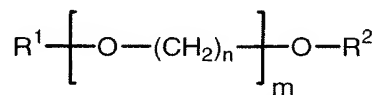
- (iv) a diol selected from at least one of linear or branched C<sub>2</sub>-C<sub>20</sub> aliphatic diols, poly(C<sub>2</sub>-C<sub>4</sub> alkylene glycol), cycloaliphatic diols having from 5 to 8 carbon atoms in the cyclic ring, monocyclic aromatic diols, bisphenols and hydrogenated bisphenols;
- (c) maintaining said portion of said plastic article in contact with said treatment composition for a period of time at least sufficient to form a treated plastic article;
- (d) removing said treated plastic article from contact with said treatment composition said water present in the treatment composition in an amount of 50 to 85 percent, said carrier present in the treatment composition in an amount of 10 to 30

percent and said diol present in the treatment composition in an amount of 5 to 20 percent, said percent all occurrences relative to the weight of the treatment composition

- (ie) contacting said treatment composition with particulate activated carbon to form a mixture of said treatment composition and particulate activated carbon;
- (iif) isolating from said mixture a substantially additive-free liquid comprising water, said carrier and said diol; and
- (iiig) optionally adding at least one additive to said substantially additive-free liquid, thereby forming a further treatment composition.

Claim 25 (Currently amended)): ~~The A~~ method of Claim 1 further comprising: treating a plastic article comprising:

- (a) providing a plastic article comprising at least one polymer selected from thermoplastic polymer and thermoset polymer;
- (b) contacting at least a portion of the surface of said plastic article with a treatment composition consisting of,
  - (i) at least one additive selected from UV stabilizers, optical brighteners, mold release agents, antistatic agents, thermal stabilizers and antimicrobial agents,
  - (ii) water,
  - (iii) at least one carrier represented by the following general formula I,



wherein R<sup>1</sup> is a radical selected from the group consisting of linear or branched C<sub>1</sub>-C<sub>18</sub> alkyl, benzyl, benzoyl and phenyl,

R<sup>2</sup> is a radical selected from the group consisting of linear or branched C<sub>1</sub>-C<sub>18</sub> alkyl, benzyl, benzoyl, phenyl and H,

n is 2, 3 or 4, and

m is 1 to 35, and

- (iv) a diol selected from at least one of linear or branched C<sub>2</sub>-C<sub>20</sub> aliphatic diols, poly(C<sub>2</sub>-C<sub>4</sub> alkylene glycol), cycloaliphatic diols having from 5 to 8 carbon atoms in the cyclic ring, monocyclic aromatic diols, bisphenols and hydrogenated bisphenols;
- (c) maintaining said portion of said plastic article in contact with said treatment composition for a period of time at least sufficient to form a treated plastic article;
- (d) removing said treated plastic article from contact with said treatment composition said water present in the treatment composition in an amount of 50 to 85 percent, said carrier present in the treatment composition in an amount of 10 to 30 percent and said diol present in the treatment composition in an amount of 5 to 20 percent, said percent all occurrences relative to the weight of the treatment composition; and
- (e) forming said treatment composition by,
  - (i) preparing a mixture of water, said carrier and said diol,
  - (ii) introducing said additive into a filter, and
  - (iii) passing said mixture over said additive and through said filter, thereby forming said treatment composition; and passing continuously said treatment composition through said filter.

Claim 26 (Currently amended): The method of Claim 1-22 further comprising, introducing continuously said treatment composition into an immersion tank through a plate having a plurality of perforations.

Claim 27 (Cancelled).

Claim 28 (Currently amended): The method of Claim 1-22 further comprising contacting at least a portion of the surface of the treated plastic article removed from contact with said treatment composition with a rinse composition comprising water, and optionally at least one of said carrier (iii) and said diol (iv).